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Saleh Ahmed
Boise State University

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Saleh Ahmed

Boise State University
salehahmed@boisestate.edu

Abstract

Social, economic, and spatial inequalities are not unknown in the megacities like Dhaka. The city has a degree of urbanization that could be termed as “hyperurbanization”. Currently, Dhaka is the home of almost 18 million people, and, prior to COVID-19, the population grew, mostly by the rural-urban migrants, by thousands of people every day. In Bangladesh, various natural hazards, food insecurity, low investment, and lack of policy attention in rural areas have played a major role in rural-urban migration. COVID-19 has brought a new reality. Despite an initial effort, the state is not in a position to provide food and other resources to its citizens for the duration of the pandemic. Increased rate of employment loss, decreased salary with poor management in the government response, and emergency assistance to the people who are in need have complicated the overall scenario. All of these contributed to the situation of deurbanization. During the COVID-19 pandemic, thousands of low-income people have left this megacity, where once they came to pursue their dreams and returned to their home villages. Even though going back to rural origins is not a defeat for all, overall prospects are not very promising in their villages either. Many of them might experience long-term poverty traps without having adequate employment or livelihood opportunities. Some find this “deurbanization” as an opportunity to ease the city’s population strain. However, this deurbanization might create a deep scar in the post-COVID economy, including the nation’s capacity to achieve the United Nations Sustainable Development Goals (UNSDGs) by 2030. Using the core arguments of resilience, this article provides critical insight into the management of urban complexity and social disruptions in post-pandemic Dhaka. Even though this article has a geographical focus, it has broader policy relevance to cities in the Global South that are facing similar challenges.

Keywords: deurbanization, megacity Dhaka, pandemic, planning, resilience

Introduction

With an estimated population of 18 million, Dhaka is the political, social, and economic capital of Bangladesh (United Nations, 2018). In recent decades, it has emerged as one of the major megacities in the Global South. Even though the city is over 400 years-old, Dhaka has experienced its phenomenal growth since 1971, when it became the capital of a sovereign nation (Afsar & Hossain, 2020). The city will continue to grow, which has also reflected in the UN prognosis and says Dhaka will have approximately 28 million population by 2030 (United Nations, 2018b). Currently, it is also one of the most densely populated cities in the world. The benefits of urbanization, however, are not equally distributed among vast majority of low-income working-class urban residents (Ahmed, 2020), who live in below-standard conditions. Nevertheless, this unequal development or distribution of opportunities could not prevent the growing trend of rural-urban migration, which says, the recent urban growth in Bangladesh, including in Dhaka, has been fueled by natural population growth as well as by a growing number of rural to urban migrants. On average, 300,000 to 400,000 people permanently migrate to Dhaka every year (World Bank, 2007), and a majority end up living in various sub-standard informal settlements (Ahmed and Rahaman, 2014). These rural-urban migrants drive the majority of urban informal economy. They provide low-cost labor in construction and other service sectors.

Prior to their rural-urban migration, a large share of them faces various natural hazards in the country-sides, since Bangladesh is one of the most natural disaster poor nations in the world. In different parts of the country, people are continuously exposed to sea level rise, tropical cyclones, flashfloods, riverbank erosion, coastal flooding, salinity intrusions, and a major variation of rainfall patterns. All of these contribute to the loss of livelihoods, income, and economic hardship, and fuel human suffering in rural areas.

In addition, rural areas usually receive lower policy and investment priorities in Bangladesh. Lack of adequate employment opportunity is among the top local economic problems. Therefore, economically distressed rural populations tend to migrate to nearby cities or to capital Dhaka. Many of these low-income rural-urban migrants end up living in substandard conditions where density is exceedingly high (Ahmed and Rahaman, 2014).

During the ongoing COVID-19 pandemic, many of these low-income people have faced even greater challenges by losing their subsistent incomes and employments. At the same time, many of them received minimal government supports (Alam, 2020). Maintaining physical distancing or remain in lockdown situation is almost impossible. Even though the geographical focus of this article is Dhaka, the scenarios for the majority of world's urban population particularly in the low-income Global South are not very different (United Nations, 2020). The sub-standard densely populated living condition has proved to be one of the major factors that can affect people during the ongoing global pandemic.

The ongoing pandemic has already exposed that existing social, economic, and spatial inequalities in Dhaka, which can further deepen urban suffering even in post-pandemic period. Despite government's efforts to economic recovery due to the ongoing pandemic, a large share of economic supports was targeted for major economic sectors. Criticism suggests that a few was directly targeted for the working-class populations, who are struggling for their day-to-day survival.

As a response, thousands of low-income urban dwellers from Dhaka have left and in the process of leaving for their village origins (Ali and Amin, 2020). In most cases, there are no promising futures waiting for them in their ancestral location-s and many of them might enter a long-term poverty trap (UNDP, 2020).

However, some residents of Dhaka might find this deurbanization process as an opportunity to ease population strain on this densely populated city. The question that remains unanswered is how does the process of depopulation and deurbanization in cities like Dhaka react to post-pandemic economic recovery, when the cities might, once again, require a tremendous formal and informal labor force. Since deurbanization can potentially create long-term poverty in some areas and it decentralizes the population, the process creates a new challenge for how nations response to increasing poverty and alter their effort to achieve long-term development goals like the United Nations Sustainable Development Goals (UNSDGs).

Addressing to these complex development issues during and after the ongoing COVID-19 global pandemic, this article uses the theoretical lens of resilience, and provides insights on how to manage social disruption and urban complexity in post-pandemic Dhaka. Despite its relevance to Dhaka, insights are relevant to other cities in the Global South that are facing similar challenges.

COVID Reality in Megacity Dhaka

For the low-income urban population, COVID-19 brought a new reality. Suddenly, they experienced orders from the government to stay at home, and faced a radical decrease in various urban economic activities and opportunities. First, the government announced the lockdown in March 25, 2020. In total there were 66 days lockdown in 2020 (BanglaNews24, 2021a). During that lockdown, there were some major policy mismatches in government-level decision-making. First, they announced this lockdown as "general holiday" (BanglaNews24, 2020). People misinterpreted this announcement, and thought it's their vacations. A major portion of urban population moved to their rural country-side origins, which eventually contributed to spread the COVID-19 pandemic across the country. Second, the government tried to keep the garments industries open, where thousands of people work, and which is also the major source of national income. Later government thought to close it. Changing decisions were confusing for majority of country's population. Due to the rapid surge of affected people in March and April 2021, the government was forced to announce the lockdown again. This time, several industries remained open (BanglaNews24, 2021a).

In the early months of 2020, people in Dhaka and other urban areas in Bangladesh were cautiously observing the pandemic outbreak and economic situation. However, without having any major savings or social security supports low-income urban residents are forced to go out on daily basis for their income. For them, stay-home order or a city-wide locked down was not a viable option (Alam, 2020). People struggled with and sometimes defied public health instructions from government sources. One individual who worked daily reported:

“My children have become anxious without food. Arranging for each meal is a worry, one has to worry about arranging breakfast, about arranging lunch.” (Daily worker)

In this bind, many of low-income working-class residents came out of their homes, disregarding government orders, to find work. By June and July of 2020, when the pandemic started to unfold in this densely crowded low-income country, non-coordinated and random reactive responses were all around the country (Anwar et al., 2020). People in general experienced a massive panic. However, for the low-income urban residents, going outside their homes for daily work became a choice between life (safety from COVID) and livelihood (income for food and essentials).^{Error! Bookmark not defined.} Sadly, at that point, there were not many opportunities for work, since everything was scaled down to a minimum at that point (Concern Worldwide, 2020).

Without food, income or any other livelihood opportunities, many low-income urban residents had only one option left, to return to their “rural” origins (Ahamad, 2020). People in Dhaka started to experience the deurbanization process beginning in June 2020. This is an unusual phenomenon for most of the urban residents in Dhaka. For the first time they have experienced population outmigration from the city, since they grew up seeing increasing in-migration and explosion of the city’s population.

At the beginning of the pandemic outbreak, the government tried to provide some emergency food supports to its distressed poor citizens. During the lockdown in April 5, 2021, the government has also allocated 5720 million Taka (1 US\$=~85 Taka) (BanglaNews24, 2021b). This money will be allocated to 12,441,900 families under the coverage of nations vulnerable group feeding. However, it is not possible for the governments to continue this type of support for longer periods. In addition, despite government initiatives, corruptions in local levels undermined the effectiveness of emergency supports. Therefore, without employments or income opportunities people will continue to face increasing hunger, malnutrition, and poverty during the COVID-19 pandemic (Rashid et al., 2020).

Deurbanization, and Deepening Poverty During the Pandemic

The deurbanization process in Dhaka during the COVID-19 pandemic have not started in a vacuum. Years of social, economic, political, and environmental marginalization of low-income urban poor fueled this process. Spatial manifestations of urban poverty are pervasive in all parts of urban lives (Ahmed and Rahaman, 2014). Some people initially thought that this deurbanization process is helpful for the city since it is overburdened with its population size and density. The deurbanization process, in theory, could help to lessen the pressure due to excessive urban density and to improve quality of life in the city. However, at the same time this process of deurbanization might create challenges in two fronts: first in urban contexts, and second in rural contexts.

Firstly, urban formal and informal economies are usually supported by the active engagement of low-income urban poor. They are integral part of urban economy, and fueling city’s continuing economic growth and prosperity (Afsar & Hossain, 2020). Because of the ongoing deurbanization process, there could be a lack of available work force to recover and sustain Dhaka’s complex urban economy in post-pandemic period. Secondly, in the rural context, the situation could be even worse. Many of the rural families partially depend on the incomes that are being earned in urban areas by their immediate or extended family members (Ahmed & Eklund, 2021). During this ongoing pandemic, people lost their employment in urban formal and informal sectors, causing less money be sent home, which has already created economic and social strains in rural economy. In addition, the deurbanization process returns former residents to the countryside, effectively adding new people to rural economy, which is already struggling. These added population in rural areas would need food, shelter, health support, along with many other basic services, when the nation is going through severe crisis due to the pandemic. However, the rural economy, particularly during this pandemic, is not robust enough to provide services or opportunities for these newly added population. Poverty and hunger are on rise (Vatican News, 2020). Since many rural communities are also exposed to various weather and climate related crises, such as floods, riverbank erosion, rainfall variability, increased poverty and hunger will make

people more vulnerable to natural hazards than ever before. However, entire story is not bleak. Part of these population might use their entrepreneurial skills and contribute to local economy. It is nevertheless not entirely clear how this process would work in rural context as soon as the pandemic is over.

Current government policies on COVID-19 response are somewhat confusing. As of early 2021, Dhaka has experienced another wave of virus transmission, which is widely known as the third wave of COVID-19. Even though the rate of affected people is higher than the previous first or second waves, which happened in 2020, government has no intentions to shut down the economy or city at all. Several top government executives mentioned that Bangladesh's economy is not strong enough so that it can afford another round of shutdown. Even though government is trying, in its maximum capacity, to make its citizens vaccinated, it is aiming to achieve some levels of hard immunity, so that nation and its economy can return to some form of normalcy.

Resilience at The Time of Destabilization

Some cities in the Global South are often blamed for their shortsighted planning, despite their efforts to manage various urban challenges (Ahmed, 2020).^{Error! Bookmark not defined.} Most of the planning and development interventions have been aimed at increasing economic growth. However, those interventions can be criticized for categorically overlooking systemic social, economic, and spatial inequalities (Ahmed & Meenar, 2018). Concepts of social justice and inclusive development were often under-prioritized. The needs and voices of low-income marginalized people were not reflected in the decision-making process (Ahamad, 2020). The ongoing pandemic made this legacy even more complex.

At this stage, it is important to address how cities like Dhaka can move towards a more inclusive urbanization, where opportunities are available to majority of its citizens. To pursue inclusive urbanization in the post-pandemic time, a renewed thinking on planning and policy is required to address increasingly complex urban challenges. It is, therefore, important to embrace the urban complexity through the theoretical lens of resilience by recognizing cross-scale and cross-sectoral interactions.

Even though resilience can be defined as a stand-alone concept, it is important to grasp the concept of stability, which refers to a condition or tendency of a system to return to a position of equilibrium when face any disturbances (Ludwig et al., 2002). Various phenomena can affect the stability of a system (Carpenter et al., 2002). During the COVID-19 pandemic, the stability of peoples' livelihoods was impacted by the sudden closure of national economy. When life becomes destabilized, the importance of resilience becomes even more apparent.

The concepts of resilience have been defined in two different ways, which highlight two different aspects of stability. One definition of resilience emphasizes efficiency, control, constancy, and predictability. All these attributes present a desire for fail-safe design and optimal performance even in times of disturbance or crises. However, those desires are appropriate for systems where sustainability or stability is low, and the process can be counter-productive for any dynamic evolving systems, where variability and novelty result in high levels of uncertainty. Scholars like C.S. Holling have referred to this as engineering resilience (Holling, 2002).

Addressing the ongoing pandemic crisis, another definition of resilience appears to be more appropriate, which stresses the importance on persistence, adaptiveness, variability, and unpredictability. This overall process of resilience emphasizes conditions that is far from any equilibrium state, where instabilities can change a system into another regime of behavior, or stability domain (Holling, 1973).

In this case, resilience can be measured by the magnitude or scale of disturbance that can be absorbed before the system changes its structure or integrity by changing the variables and process that controls its behavior (Holling & Gunderson, 2002). In context of urban areas, this means that resilience is not just a defensive system in place to minimize disruption during any manmade or natural crisis; rather it is an opportunity for transformation and advancement.

The concept of resilience highlights the need to understand the system from a holistic perspective, which makes systems thinking is more appropriate than any time before. Systems thinking is the interdisciplinary and integrated study of social, economic, political, environmental, infrastructural, and informational systems. This holistic approach provides the ability to comprehend the interconnectedness and interdependencies to achieve a desired outcome, particularly, which are complex or wicked in nature (Stroh, 2015).

The challenges associated with COVID-19 pandemic illustrates that it as a wicked problem, involves various aspects of society, environment, and economy. The challenges that societies are now facing during the pandemic, in most cases, they are multidimensional in nature, which require the engagement of multiple stakeholders, address multiple causal-effect equations, and focus on multi-dimensional symptoms that can affect urban livelihoods and at the same time, allow multiple solutions to emerge.

Meanwhile, the situation of pandemic is constantly evolving. It becomes challenging to form wise answers that will not cause further social disruptions but rather will create new opportunities, which can pave paths towards recovery from the despair experienced during the pandemic. Fragmented, piecemeal efforts will not help. Rather creative, flexible, and adaptive planning and development interventions can help communities bounce back to an inclusive, humane, and resilient condition.

Therefore, it is easy to reach a conclusion that resilience framework using the deep understanding of systems thinking can equip planners and policy makers with the insights, judgement, and skills to consider resilience which include interactions, processes, synergies, and trade-offs between various sub-components at multiple levels that are critical for resilient livelihoods both in rural and urban areas.

Policy Response

During the pandemic, we have seen that governments in many societies failed to act in a coordinated manner, mostly because of the lack of an institutional framework to promote resilience that can support polycentric initiatives that engage various stakeholders. Rather, it has been shown that during the pandemic democratic space and the appreciation of inclusivity and polycentricity in the decision-making process had been compromised (Repucci & Slipowitz, 2020). Centralized efforts without the engagement of people or stakeholders at various scales can have limited outcomes.

To address the social disruption and urban complexity during this pandemic, cities like Dhaka can respond in two different ways. In one way, planners and policy makers can focus on renewal and novelty, while others can pursue buffering themselves from any positive change (Gunderson, 2002). In the latter case, inequality will exist through the urban veins, which can further amplify existing vulnerabilities in post-pandemic times or during any other future crises.

Despite the social, economic, political, and environmental damages caused by the pandemic, this crisis also brought the opportunity to revisit conventional urban strategies in many parts of the world that have been used for generations. If managed properly by creating social, economic, and political space for polycentric and inclusive process, unpredictable new opportunities may appear at the core of sustainable development (Holling 1994).

Uncertainty is becoming increasingly common in modern day social, economic, political, and environmental systems. Often the nature of uncertainties is non-linear, unpredictable, and unknown for the decision makers. However, when an unprepared system confronts any form of uncertainty, the outcome often results in large-scale panic, crisis, and human and economic loss. Governments should be prepared for “unknown-unknowns,” so that in the time of crisis, systems do not fall apart, but retain the core functions of the social and economic systems.

Since modern-day uncertainties are often non-linear and unpredictable, it is important to embrace the components of uncertainties as part of society’s most “predictive” planning and response. Proactive planning and development interventions should be integral to national or regional-level planning processes. Since people’s mobility and livelihoods are not restricted into a specific space, urban planning should embrace and acknowledge the rural-urban connectivity of people, goods, and information and regional dimensions of growth, change, and development.

Ultimately, the major obstacles to any forms of sustainable development in post-pandemic period can be reduced to three basic categories: willingness, understanding, and capacity (Gallopín, 2002). The first obstacle is the lack of political will to implement changes that are critically important. Existing asymmetric power structures in the society, vested interests of social, economic, and political elites, and conceptions by humankind that emphasize hatred, or hostility, unfair and unequal competition, and egoistic individualism over cooperation and solidarity are at the core of society’s struggle to achieve a resilient and inclusive development. Even in cases where political will is present, another obstacle could be the lack of understanding about the nature and features of complex systems that are driving or could drive social disruptions and urban challenges during and after the pandemic. This lack of understanding of

these complex but dynamic systems can result in a failed attempt to address the relevant linkages within and between systems across scales and at the time when resilience is most needed. Finally, lack of financial and institutional capacities, weak infrastructure, rampant poverty, and other social and cultural limitations can contribute to the insufficient capacity to perform the actions and changes needed in the time of crises or after the crisis.

Conclusion

Social disruptions, urban complexities, including inequality, are on rise. It has been proven that our practiced development mantra needs some additional reflections using social justice, inclusivity, and sustainability in its process of achieving sustainability and resilience. Responding to rising urban inequalities requires complex understanding on the interrelations of various social, economic, political, and environmental factors on various scales. In recent decades, most countries like Bangladesh had no prior experience tackling a pandemic at this scale. In their immediate response in early days of pandemic, the government responded fragmentedly and on reactive basis. Because of poor institutional capacity, many of the efforts proved to be shortsighted and have been criticized for lack of transparency and accountability. The early response can be also criticized for corruptions on various levels. A renewed thinking on policy and planning is necessary using resilience at the core of recovery and growth that are sustainable and inclusive in nature and provide opportunities for all, not just a few urban elites.

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